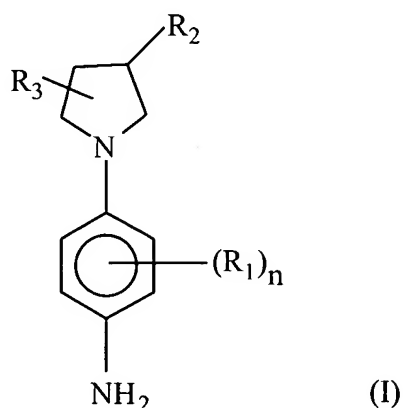


## I. AMENDMENT

This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims:

1. (Currently amended) A dyeing composition for dyeing keratinous fibres comprising, in an appropriate dyeing medium, at least one cationic tertiary paraphenylenediamine containing a pyrrolidine ring, and at least one polymer containing a fatty chain chosen from cationic polyurethanes containing a fatty chain, cationic celluloses containing a fatty chain, cationic derivatives of polyvinylpyrrolidone containing a fatty chain, anionic polymers containing a fatty chain containing at least one unit of the (C<sub>10</sub>-C<sub>30</sub>)alkyl ester of (meth)acrylic acid type or at least one allyl ether unit containing a fatty chain, wherein said cationic tertiary paraphenylenediamine containing a pyrrolidine ring corresponds to formula I:



in which

n varies from 0 to 4, it being understood that when n is greater than or equal to 2, then the radicals R<sub>1</sub> may be identical or different,

R<sub>1</sub> represents a halogen atom; a saturated or unsaturated, aliphatic or alicyclic, C<sub>1</sub>-C<sub>6</sub> hydrocarbon chain, it being possible for the chain to contain one or more oxygen, nitrogen, silicon or sulphur atoms or an SO<sub>2</sub> group, and it being possible for the chain to be substituted with one or more hydroxyl or amino radicals; an onium radical Z, the radical R<sub>1</sub> not containing a peroxide bond, or diazo, nitro or nitroso radicals,

R<sub>2</sub> represents an onium radical Z or a radical -X-C=NR<sub>8</sub>-NR<sub>9</sub>R<sub>10</sub> in which X represents an oxygen atom or a radical -NR<sub>11</sub> and R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub> and R<sub>11</sub> represent a hydrogen atom, a C<sub>1</sub>-C<sub>4</sub> alkyl radical or a C<sub>1</sub>-C<sub>4</sub> hydroxyalkyl radical,

R<sub>3</sub> represents a hydrogen atom or a hydroxyl radical.

2. (Canceled)

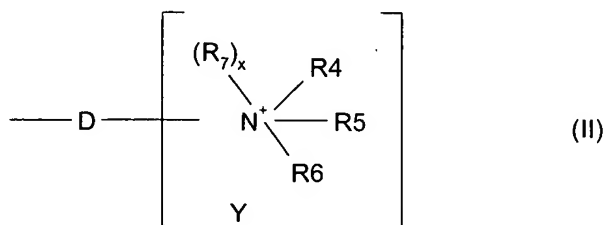
3. (Currently amended) The composition of claim [[2]] 1, in which the cationic tertiary paraphenylenediamine is such that n is equal to 0.

4. (Currently amended) The composition of claim [[2]] 1, in which the cationic tertiary paraphenylenediamine is such that n is equal to 1 and R<sub>1</sub> is chosen from the group consisting of a halogen atom; a saturated or unsaturated, aliphatic or alicyclic, C<sub>1</sub>-C<sub>6</sub> hydrocarbon chain; it being possible for one or more carbon atoms to be replaced with an oxygen, nitrogen, silicon or sulphur atom, or with an SO<sub>2</sub> group, the radical R<sub>1</sub> not containing a peroxide bond, or diazo, nitro or nitroso radicals.

5. (Currently amended) The composition of claim [[2]] 1, in which the cationic tertiary paraphenylenediamine is such that R<sub>1</sub> is chosen from chlorine, bromine, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> hydroxyalkyl, C<sub>1</sub>-C<sub>4</sub> aminoalkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy or C<sub>1</sub>-C<sub>4</sub> hydroxyalkoxy radicals.

6. (Original) The composition of claim 5, in which the cationic tertiary paraphenylenediamine is such that R<sub>1</sub> is chosen from a methyl, hydroxymethyl, 2-hydroxyethyl, 1,2-dihydroxyethyl, methoxy, isopropoxy or 2-hydroxyethoxy radical.

7. (Currently amended) The composition of claim [[2]] 1, in which the cationic tertiary paraphenylenediamine is such that R<sub>2</sub> represents the onium radical Z corresponding to formula (II)



in which

D is a single bond of a linear or branched C<sub>1</sub>-C<sub>14</sub> alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl, C<sub>1</sub>-C<sub>6</sub> alkoxy or amino radicals and which may carry one or more ketone functional groups;

R<sub>4</sub>, R<sub>5</sub> and R<sub>6</sub>, taken separately, represent a C<sub>1</sub>-C<sub>15</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an aryl radical; a benzyl radical; a C<sub>1</sub>-C<sub>6</sub> amidoalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical in which the amine is mono- or di-substituted with a C<sub>1</sub>-C<sub>4</sub> alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; or

R<sub>4</sub>, R<sub>5</sub> and R<sub>6</sub> together, in pairs, form, with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated carbon ring which may contain one or more heteroatoms, it being possible for the cationic ring to be substituted with a halogen atom, a hydroxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a C<sub>1</sub>-C<sub>6</sub> alkoxy radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, an amido radical, a carboxyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl radical, a thio (-SH) radical, a C<sub>1</sub>-C<sub>6</sub> thioalkyl (-R-SH) radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical;

R<sub>7</sub> represents a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical whose amine is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carboxyalkyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical; a C<sub>1</sub>-C<sub>6</sub> trifluoroalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a C<sub>1</sub>-C<sub>6</sub> sulphonamidoalkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphinyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylsulphonamido(C<sub>1</sub>-C<sub>6</sub>)alkyl radical;

x is 0 or 1,

when  $x = 0$ , then the linking arm is attached to the nitrogen atom carrying the radicals  $R_4$  to  $R_6$ ;

when  $x = 1$ , then two of the radicals  $R_4$  to  $R_6$  form, together with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated ring and D is linked to the carbon atom of the saturated ring;

Y is a counter-ion.

8. (Original) The composition of claim 7, in which the cationic tertiary para-phenylenediamine is such that  $R_2$  corresponds to formula II in which  $x$  is equal to 0 and  $R_4$ ,  $R_5$  and  $R_6$  separately are preferably chosen from a  $C_1$ - $C_6$  alkyl radical, a  $C_1$ - $C_4$  monohydroxyalkyl radical, a  $C_2$ - $C_4$  polyhydroxyalkyl radical, a  $(C_1$ - $C_6)$ alkoxy( $C_1$ - $C_4$ )alkyl radical, a  $C_1$ - $C_6$  amidoalkyl radical, a tri( $C_1$ - $C_6$ )alkylsilane( $C_1$ - $C_6$ )alkyl radical, or  $R_4$  with  $R_5$  form together an azetidine ring, a pyrrolidine, piperidine, piperazine or morpholine ring,  $R_6$  being chosen in this case from a  $C_1$ - $C_6$  alkyl radical; a  $C_1$ - $C_6$  monohydroxyalkyl radical, a  $C_2$ - $C_6$  polyhydroxyalkyl radical; a  $C_1$ - $C_6$  aminoalkyl radical, an aminoalkyl radical which is mono- or di-substituted with a  $(C_1$ - $C_6)$ alkyl radical, a  $(C_1$ - $C_6)$ alkylcarbonyl, amido or  $(C_1$ - $C_6)$ alkylsulphonyl radical; a  $C_1$ - $C_6$  carbamylalkyl radical; a tri( $C_1$ - $C_6$ )alkylsilane( $C_1$ - $C_6$ )alkyl radical; a  $(C_1$ - $C_6)$ alkyl carboxy( $C_1$ - $C_6$ )alkyl radical; a  $(C_1$ - $C_6)$ alkylcarbonyl( $C_1$ - $C_6$ )alkyl radical; an N- $(C_1$ - $C_6)$ alkylcarbamyl( $C_1$ - $C_6$ )alkyl radical.

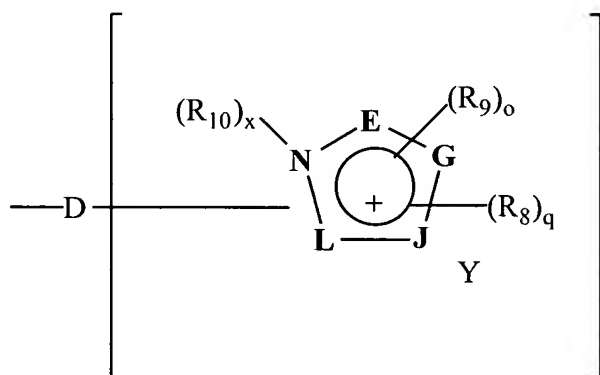
9. (Original) The composition of claim 7, in which the cationic tertiary para-phenylenediamine is such that  $R_2$  corresponds to formula II in which  $x$  is equal to 1 and  $R_7$  is chosen from a  $C_1$ - $C_6$  alkyl radical; a  $C_1$ - $C_6$  monohydroxyalkyl radical; a  $C_2$ - $C_6$  polyhydroxyalkyl radical; a  $C_1$ - $C_6$  aminoalkyl radical, a  $C_1$ - $C_6$  aminoalkyl radical whose amine is mono- or di-substituted with a  $(C_1$ - $C_6)$ alkyl,  $(C_1$ - $C_6)$ alkylcarbonyl, amido or a  $(C_1$ - $C_6)$ alkylsulphonyl radical; a  $C_1$ - $C_6$  carbamylalkyl radical, a tri( $C_1$ - $C_6$ )alkylsilane( $C_1$ - $C_6$ )alkyl radical; a  $(C_1$ - $C_6)$ alkylcarboxy( $C_1$ - $C_6$ )alkyl radical; a  $(C_1$ - $C_6)$ alkylcarbonyl( $C_1$ - $C_6$ )alkyl radical; an N- $(C_1$ - $C_6)$ alkylcarbamyl( $C_1$ - $C_6$ )alkyl radical;  $R_4$  with  $R_5$  together form an azetidine, pyrrolidine, piperidine, piperazine or morpholine ring,  $R_6$  being chosen in this case from a  $C_1$ - $C_6$  alkyl radical; a  $C_1$ - $C_6$  monohydroxyalkyl radical; a  $C_2$ - $C_6$  polyhydroxyalkyl radical; a  $C_1$ - $C_6$  aminoalkyl radical; a  $C_1$ - $C_6$  aminoalkyl radical whose amine is mono- or di-substituted with a  $(C_1$ - $C_6)$ alkyl,  $(C_1$ - $C_6)$ alkylcarbonyl, amido or  $(C_1$ - $C_6)$ alkylsulphonyl radical; a  $C_1$ - $C_6$  carbamylalkyl radical; a tri( $C_1$ - $C_6$ )alkylsilane( $C_1$ - $C_6$ )alkyl radical; a  $(C_1$ - $C_6)$ alkylcarboxy( $C_1$ -

C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical.

10. (Original) The composition of claim 7, in which the cationic tertiary para-phenylenediamine is such that D is a single bond or an alkylene chain which may be substituted.

11. (Original) The composition claim 7, in which the cationic tertiary para-phenylenediamine is such that R<sub>2</sub> is a trialkylammonium radical.

12. (Currently amended) The composition of claim [[2]] 1, in which the cationic tertiary para-phenylenediamine is such that R<sub>2</sub> represents the onium radical Z corresponding to formula III



(III)

in which

D is a single bond or a linear or branched C<sub>1</sub>-C<sub>14</sub> alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl, C<sub>1</sub>-C<sub>6</sub> alkoxy or amino radicals, and which may carry one or more ketone functional groups;

the vertices E, G, J, L, which are identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a pyrrole, pyrazole, imidazole, triazole, oxazole, isooxazole, thiazole, isothiazole ring,

q is an integer between 0 and 4 inclusive;

o is an integer between 0 and 3 inclusive;

q+o is an integer between 0 and 4;

the radicals  $R_8$ , which are identical or different, represent a halogen atom, a hydroxyl radical, a  $C_1$ - $C_6$  alkyl radical, a  $C_1$ - $C_6$  monohydroxyalkyl radical, a  $C_2$ - $C_6$  polyhydroxyalkyl radical, a  $C_1$ - $C_6$  alkoxy radical, a tri( $C_1$ - $C_6$ )alkylsilane( $C_1$ - $C_6$ )alkyl radical, an amido radical, a carboxyl radical, a  $C_1$ - $C_6$  alkylcarbonyl radical, a thio radical, a  $C_1$ - $C_6$  thioalkyl radical, a ( $C_1$ - $C_6$ )alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a ( $C_1$ - $C_6$ )alkyl, ( $C_1$ - $C_6$ )alkylcarbonyl, amido or ( $C_1$ - $C_6$ )alkylsulphonyl radical; a  $C_1$ - $C_6$  monohydroxyalkyl radical or a  $C_2$ - $C_6$  polyhydroxyalkyl radical; it being understood that the radicals  $R_8$  are carried by a carbon atom,

the radicals  $R_9$ , which are identical or different, represent a  $C_1$ - $C_6$  alkyl radical, a  $C_1$ - $C_6$  monohydroxyalkyl radical, a  $C_2$ - $C_6$  polyhydroxyalkyl radical, a tri( $C_1$ - $C_6$ )alkylsilane( $C_1$ - $C_6$ )alkyl radical, a ( $C_1$ - $C_6$ )alkoxy( $C_1$ - $C_6$ )alkyl radical, a  $C_1$ - $C_6$  carbamylalkyl radical, a ( $C_1$ - $C_6$ )alkylcarboxy( $C_1$ - $C_6$ )alkyl radical, a benzyl radical; it being understood that the radicals  $R_9$  are carried by a nitrogen,

$R_{10}$  represents a  $C_1$ - $C_6$  alkyl radical; a  $C_1$ - $C_6$  monohydroxyalkyl radical; a  $C_2$ - $C_6$  polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a  $C_1$ - $C_6$  aminoalkyl radical, a  $C_1$ - $C_6$  aminoalkyl radical whose amine is substituted with a ( $C_1$ - $C_6$ )alkyl, ( $C_1$ - $C_6$ )alkylcarbonyl, amido or ( $C_1$ - $C_6$ )alkylsulphonyl radical; a  $C_1$ - $C_6$  carboxyalkyl radical; a  $C_1$ - $C_6$  carbamylalkyl radical; a  $C_1$ - $C_6$  trifluoroalkyl radical; a tri( $C_1$ - $C_6$ )alkylsilane( $C_1$ - $C_6$ )alkyl radical; a  $C_1$ - $C_6$  sulphonamidoalkyl radical; a ( $C_1$ - $C_6$ )alkylcarboxy( $C_1$ - $C_6$ )alkyl radical; a ( $C_1$ - $C_6$ )alkylsulphinyl( $C_1$ - $C_6$ )alkyl radical; a ( $C_1$ - $C_6$ )alkylsulphonyl( $C_1$ - $C_6$ )alkyl radical; a ( $C_1$ - $C_6$ )alkylcarbonyl( $C_1$ - $C_6$ )alkyl radical; an N-( $C_1$ - $C_6$ )alkylcarbamyl( $C_1$ - $C_6$ )alkyl radical; an N-( $C_1$ - $C_6$ )alkylsulphonamido( $C_1$ - $C_6$ )alkyl radical;

x is 0 or 1

when  $x = 0$ , the linking arm D is attached to the nitrogen atom,

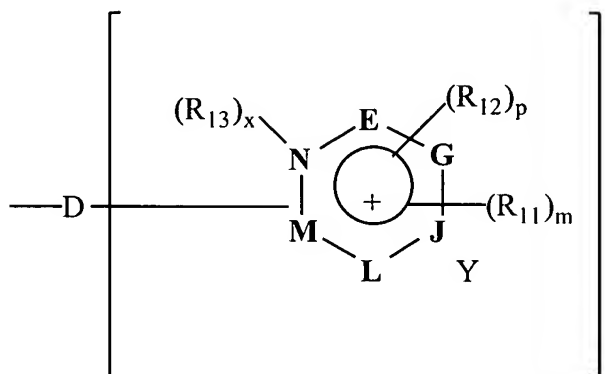
when  $x = 1$ , the linking arm D is attached to one of the vertices E, G, J or L,

Y is a counter-ion.

13. (Original) The composition of claim 12, in which the cationic tertiary para-phenylenediamine is such that the vertices E, G, J and L form an imidazole ring.

14. (Original) The composition of claim 12, in which the cationic tertiary para-phenylenediamine is such that x is equal to 0, D is a single bond or an alkylene chain which may be substituted.

15. (Currently amended) The composition of claim [[2]] 1, in which the cationic tertiary para-phenylenediamine is such that R<sub>2</sub> represents an onium radical Z corresponding to formula IV



(IV)

in which:

D is a single bond or a linear or branched C<sub>1</sub>-C<sub>14</sub> alkylene chain which may contain one or more heteroatoms chosen from an oxygen, sulphur or nitrogen atom, and which may be substituted with one or more hydroxyl, C<sub>1</sub>-C<sub>6</sub> alkoxy or amino radicals, and which may carry one or more ketone functional groups;

the vertices E, G, J, L and M, which are identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a ring chosen from the pyridine, pyrimidine, pyrazine, triazine and pyridazine rings;

p is an integer between 0 and 3 inclusive;

m is an integer between 0 and 5 inclusive;

p+m is an integer between 0 and 5;

the radicals R<sub>11</sub>, which are identical or different, represent a halogen atom, a hydroxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a C<sub>1</sub>-C<sub>6</sub> alkoxy radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-

C<sub>6</sub>)alkyl radical, an amido radical, a carboxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkylcarbonyl radical, a thio radical, a C<sub>1</sub>-C<sub>6</sub> thioalkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylthio radical, an amino radical, an amino radical which is substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical or a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; it being understood that the radicals R<sub>11</sub> are carried by a carbon atom,

the radicals R<sub>12</sub>, which are identical or different, represent a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a benzyl radical; it being understood that the radicals R<sub>12</sub> are carried by a nitrogen,

R<sub>13</sub> represents a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical, a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical whose amine is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carboxyalkyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical; a C<sub>1</sub>-C<sub>6</sub> trifluoroalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a C<sub>1</sub>-C<sub>6</sub> sulphonamidoalkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphinyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylsulphonamido(C<sub>1</sub>-C<sub>6</sub>)alkyl radical;

x is 0 or 1

when x = 0, the linking arm D is attached to the nitrogen atom,

when x = 1, the linking arm D is attached to one of the vertices E, G, J, L or M,

Y is a counter-ion.

16. (Original) The composition of claim 15, in which the vertices E, G, J, L and M form, with the nitrogen of the ring, a ring chosen from pyridine and pyrimidine rings.

17. (Original) The composition of claim 15, in which the cationic tertiary para-phenylenediamine is such that x is equal to 0 and R<sub>11</sub> is chosen from a hydroxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a C<sub>1</sub>-C<sub>6</sub>



alkoxy radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, an amido radical, a C<sub>1</sub>-C<sub>6</sub> alkylcarbonyl radical, an amino radical, an amino radical which is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical or a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical and R<sub>12</sub> is chosen from a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical.

18. (Original) The composition of claim 15, in which the cationic tertiary para-phenylenediamine is such that x is equal to 1 and R<sub>13</sub> is chosen from a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical, a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical whose amine is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl radical, an amido radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; R<sub>11</sub> is chosen from a hydroxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a C<sub>1</sub>-C<sub>6</sub> alkoxy radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, an amido radical, a C<sub>1</sub>-C<sub>6</sub> alkylcarbonyl radical, an amino radical, an amino radical which is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; and R<sub>12</sub> is chosen from a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical.

19. (Original) The composition of claim 15, in which the cationic tertiary para-phenylenediamine is such that R<sub>11</sub>, R<sub>12</sub> and R<sub>13</sub> are alkyl radicals which may be substituted.

20. (Currently amended) The composition of claim [[2]] 1, in which the cationic tertiary para-phenylenediamine is such that the radical R<sub>2</sub> is the radical of formula -XP(O)(O-)OCH<sub>2</sub>CH<sub>2</sub>N<sup>+</sup>(CH<sub>3</sub>)<sub>3</sub> where X represents an oxygen atom or a radical -NR<sub>14</sub>, R<sub>14</sub> representing a hydrogen, a C<sub>1</sub>-C<sub>4</sub> alkyl radical or a hydroxyalkyl radical.

21. (Currently amended) The composition of claim [[2]] 1, in which the cationic tertiary para-phenylenediamine is such that the radical R<sub>2</sub> is a guanidine radical of formula -X-C=NR<sub>8</sub>-NR<sub>19</sub>R<sub>10</sub>, X represents an oxygen atom or a radical -NR<sub>11</sub>, R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub> and R<sub>11</sub> representing a hydrogen, a C<sub>1</sub>-C<sub>4</sub> alkyl radical or a hydroxyalkyl radical.

22. (Original) The composition of claim 1, in which the cationic tertiary para-phenylene is chosen from the group consisting of

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride,  
[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide  
N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethyl- guanidinium chloride  
N-[1-(4-Aminophenyl)pyrrolidin-3-yl] guanidinium chloride  
3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride  
[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride  
[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropyl)ammonium chloride  
[1-(4-Aminophenyl)pyrrolidin-3-yl]-(trimethylammonium-hexyl)dimethylammonium dichloride  
[1-(4-Aminophenyl)pyrrolidin-3-yl]oxophosphorylcholine  
{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl} trimethylammonium chloride  
1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium chloride  
3-{3-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride  
1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride  
3-{3-[1-(5-trimethylsilanylethyl-4-Amino-3- trimethylsilanylethylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-um chloride  
[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride  
[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyltetradecylammonium chloride  
N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethyl guanidinium chloride  
N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl] guanidinium chloride  
3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride  
[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropylammonium chloride

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(trimethylammoniumhexyl-dimethylammonium dichloride

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]oxophosphorylcholine

{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}trimethylammonium chloride

1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium chloride

3-{3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]-propyl} 1-methyl-3H-imidazol-1-um chloride

1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride

[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]trimethylammonium chloride

3-[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

3-{3-[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-um chloride

[1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]trimethylammonium chloride

3-[1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride

1'-(4-Amino-3-methylphenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride

3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride

3-{[1-(4-Amino-3-methylphenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyltrimethylammonium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium bromide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium methanesulphate

[1-(4-aminophenyl)pyrrolidin-3-yl]butyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]pentyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]hexyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]heptyltrimethylammonium iodide

[1-(4-Aminophenyl)pyrrolidin-3-yl]octyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]decyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyltrimethylammonium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyltrimethylammonium iodide.

23. (Original) The composition of claim 1, in which the cationic tertiary para-phenylene is chosen from the group consisting of [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride;

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide;

N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethyl guanidinium chloride

N-[1-(4-Aminophenyl)pyrrolidin-3-yl] guanidinium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride;

[1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethylammonium chloride

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropyl)ammonium chloride;

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyltetradecylammonium chloride

N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethyl guanidinium chloride

N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl] guanidinium chloride

3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropyl)ammonium chloride

1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride

1'-(4-Amino-3-methylphenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride

3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride

3-{[1-(4-Amino-3-methylphenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride

3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanyl-propyl)-3H-imidazol-1-ium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium iodide

[1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium bromide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium methosulphate

[1-(4-aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide  
 [1-(4-aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide  
 [1-(4-aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide  
 [1-(4-aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium chloride  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium iodide.

24. (Original) The composition of claim 1, in which the cationic tertiary para-phenylene is chosen from the group consisting of [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide  
 N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethyl guanidinium chloride  
 N-[1-(4-Aminophenyl)pyrrolidin-3-yl] guanidinium chloride  
 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride  
 [1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride  
 [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropyl)ammonium chloride  
 [1-(4-Aminophenyl)pyrrolidin-3-yl]-(trimethylammoniumhexyl)dimethylammonium dichloride  
 1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride  
 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride  
 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride  
 [1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium chloride  
 [1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium bromide  
 [1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium methosulphate  
 [1-(4-aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide  
 [1-(4-aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide  
 [1-(4-aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide  
 [1-(4-aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide  
 [1-(4-aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyl dimethylammonium chloride  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyl dimethylammonium iodide.

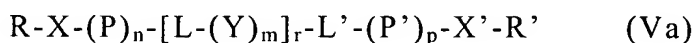
25. (Original) The composition of claim 1, in which the cationic tertiary para-phenylene is chosen from the group consisting of

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride  
 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride  
 [1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride  
 1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride.

26. (Original) The composition of claim 1, in which the cationic tertiary para-phenylene is chosen from the group consisting of

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride, and [1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride.

27. (Original) The composition claim 1, in which the cationic polymer containing a fatty chain is a cationic associative polyurethane of general formula (Va):



in which:

R and R', which are identical or different, represent a hydrophobic group or a hydrogen atom;

X and X', which are identical or different, represent a group containing an amine functional group carrying or otherwise a hydrophobic group, or alternatively the group L'';

L, L' and L'', which are identical or different, represent a group derived from a diisocyanate;

P and P', which are identical or different, represent a group containing an amine functional group carrying or otherwise a hydrophobic group;

Y represents a hydrophilic group;

r is an integer between 1 and 100, preferably between 1 and 50 and in particular between 1 and 25;

n, m and p are each, independently of the others, between 0 and 1000;

the molecule containing at least one protonated or quaternized amine functional group and at least one hydrophobic group.

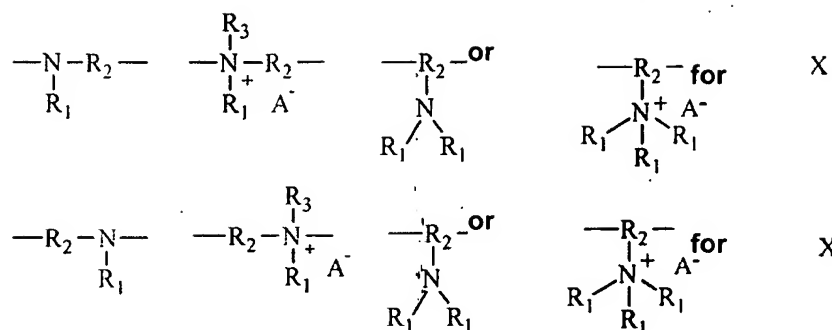
28. (Original) The composition of claim 27, characterized in that R and R' both represent independently a hydrophobic group, X, X' each represent a group L'', n and p are between 1 and 1 000.

29. (Original) The composition of claim 27, characterized in that R and R' both represent independently a hydrophobic group, X and X' both represent independently a group containing a quaternary amine, n and p are equal to zero.

30. (Original) The composition of claim 27, characterized in that R and R' represent a radical or a linear or branched, saturated or unsaturated, polymer containing a hydrocarbon chain in which one or more of the carbon atoms may be replaced by a heteroatom chosen from S, N, O and P, or containing a silicone or a perfluorinated chain.

31. (Original) The composition of claim 27, characterized in that X and X' represent one of the formulae:





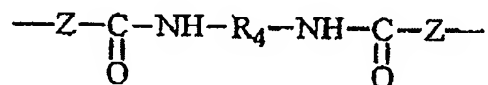
in which:

R<sub>2</sub> represents a linear or branched alkylene radical having from 1 to 20 carbon atoms, containing or otherwise a saturated or unsaturated ring, or an arylene radical, it being possible for one or more of the carbon atoms to be replaced by a heteroatom chosen from N, S, O, P;

R<sub>1</sub> and R<sub>3</sub>, which are identical or different, denote a linear or branched C<sub>1</sub>-C<sub>30</sub> alkyl or alkenyl radical, an aryl radical, it being possible for at least one of the carbon atoms to be replaced by a heteroatom chosen from N, S, O, P;

A<sup>-</sup> is a physiologically acceptable counter-ion.

32. (Original) The composition of claim 27, characterized in that the groups L, L' and L'', which are identical or different, represent the formula:

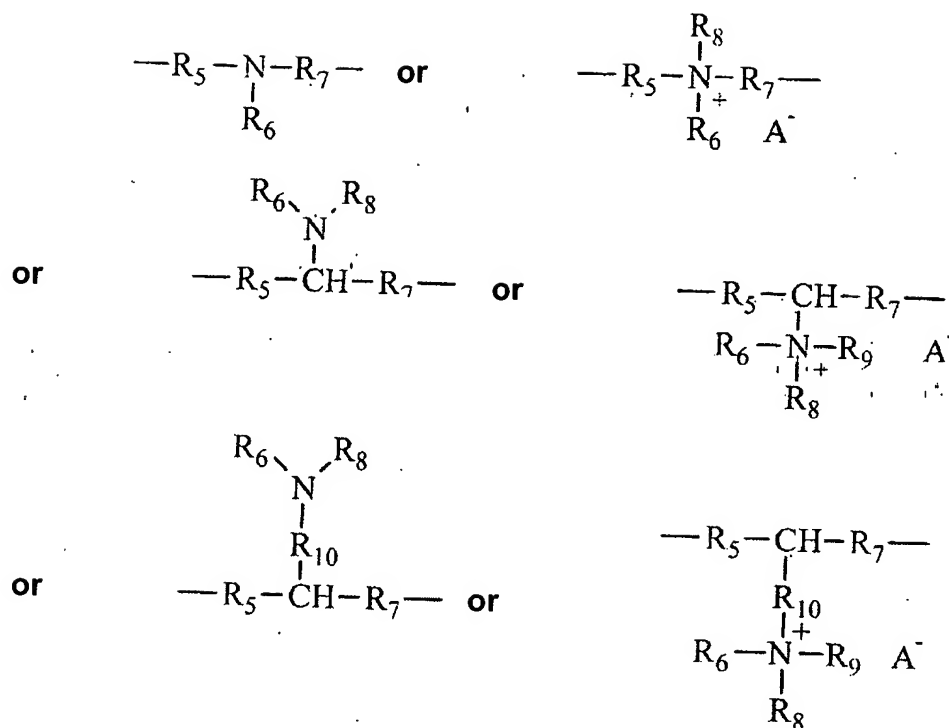


in which:

Z represents -O-, -S- or -NH-; and

R<sub>4</sub> represents a linear or branched alkylene radical having from 1 to 20 carbon atoms, containing or otherwise a saturated or unsaturated ring, an arylene radical, it being possible for one or more of the carbon atoms to be replaced by a heteroatom chosen from N, S, O and P.

33. (Original) The composition of claim 27, characterized in that the groups P and P', which are identical or different, represent at least one of the following formulae:



in which:

R<sub>5</sub> and R<sub>7</sub> have the same meanings as R<sub>2</sub>;

R<sub>6</sub>, R<sub>8</sub> and R<sub>9</sub> have the same meanings as R<sub>1</sub> and R<sub>3</sub>;

R<sub>10</sub> represents a linear or branched alkylene group, which is optionally unsaturated and which may contain one or more heteroatoms chosen from N, O, S and P,

and A<sup>-</sup> is a physiologically acceptable counter-ion.

34. (Original) The composition of claim 27, characterized in that Y represents a group derived from ethylene glycol, diethylene glycol or propylene glycol, or a group derived from a polymer chosen from polyethers, sulfonated polyesters and sulfonated polyamides.

35. (Currently amended) The composition of claim 27, characterized in that the cationic associative polyurethanes have a number-average molecular mass between 400 and 500 000; ~~preferably between 1 000 and 400 000 and in particular between 1 000 and 300 000.~~

36. (Original) The composition of claim 1, in which the polymer containing a cationic fatty chain is a cationic cellulose containing a fatty chain.

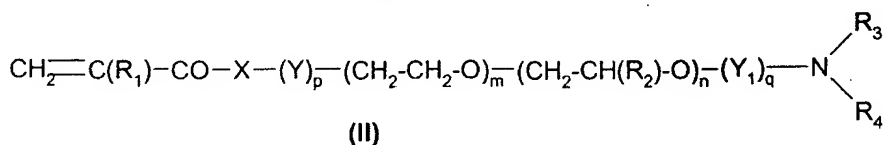
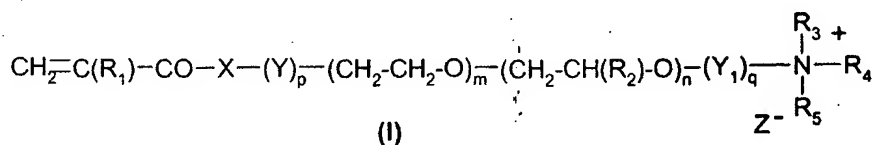
37. (Original) The composition of claim 36, in which the cationic cellulose containing a fatty chain is chosen from quaternized celluloses modified by groups containing at least one fatty chain, chosen from alkyl, arylalkyl and alkylaryl groups containing from 8 to 30 carbon atoms, or mixtures thereof.

38. (Original) The composition of claim 1, in which the cationic polymer containing a fatty chain is a cationic derivative of polyvinylpyrrolidone containing a fatty chain.

39. (Original) The composition of claim 38, in which the cationic derivative of polyvinylpyrrolidone containing a fatty chain comprises:

at least one cationic monomer of the vinylpyrrolidone type containing a fatty chain

at least one monomer having the following structure (I) or (II):



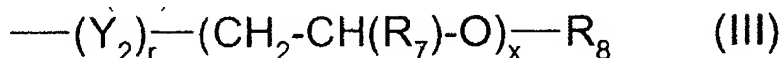
in which:

X denotes an oxygen atom or a radical NR<sub>6</sub>,

R<sub>1</sub> and R<sub>6</sub> denote, independently of each other, a hydrogen atom or a linear or branched C<sub>1</sub>-C<sub>5</sub> alkyl radical,

R<sub>2</sub> denotes a linear or branched C<sub>1</sub>-C<sub>4</sub> alkyl radical,

R<sub>3</sub>, R<sub>4</sub> and R<sub>5</sub> denote, independently of each other, a hydrogen atom, a linear or branched C<sub>1</sub>-C<sub>30</sub> alkyl radical or a radical of formula (III):



Y, Y<sub>1</sub> and Y<sub>2</sub> denote, independently of each other, a linear or branched C<sub>2</sub>-C<sub>16</sub> alkylene radical,

R<sub>7</sub> denotes a hydrogen atom, or a linear or branched C<sub>1</sub>-C<sub>4</sub> alkyl radical or a linear or branched C<sub>1</sub>-C<sub>4</sub> hydroxyalkyl radical,

R<sub>8</sub> denotes a hydrogen atom or a linear or branched C<sub>1</sub>-C<sub>30</sub> alkyl radical,

p, q and r denote, independently of each other, either the value zero, or the value 1,  
m and n denote, independently of each other, an integer ranging from 0 to 100,  
x denotes an integer ranging from 1 to 100,  
Z denotes an anion of an organic or inorganic acid,

provided that:

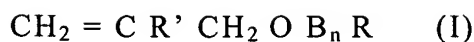
at least one of the substituents R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub> or R<sub>8</sub> denotes a linear or branched C<sub>9</sub>-C<sub>30</sub> alkyl radical,

if m or n is different from zero, then q is equal to 1,

if m or n are equal to zero, then p or q is equal to 0.

40. (Original) The composition of claim 39, characterized in that, in formulae (I) or (II), the radicals R<sub>3</sub>, R<sub>4</sub> and R<sub>5</sub> denote, independently of each other, a hydrogen atom or a linear or branched C<sub>1</sub>-C<sub>30</sub> alkyl radical.
41. (Original) The composition of claim 39, characterized in that the monomer b) is a monomer of formula (I).
42. (Original) The composition of claim 41, characterized in that, in formula (I), m and n are equal to zero.
43. (Original) The composition of claim 39, characterized in that the cationic polyvinylpyrrolidone polymer(s) contain one or more additional cationic or nonionic monomers.
44. (Original) The composition of claim 43, characterized in that the cationic polyvinylpyrrolidone is a terpolymer comprising:
- a) a monomer of the pyrrolidone type,
  - b) a monomer of formula (I) in which p = 1, q = 0, R<sub>3</sub> and R<sub>4</sub> denote, independently of each other, a hydrogen atom or a C<sub>1</sub>-C<sub>5</sub> alkyl radical and R<sub>5</sub> denotes a C<sub>9</sub>-C<sub>24</sub> alkyl radical, and
  - c) a monomer of formula (II) in which R<sub>3</sub> and R<sub>4</sub> denote, independently of each other, a hydrogen atom or a C<sub>1</sub>-C<sub>5</sub> alkyl radical.

45. (Original) The composition of claim 44, characterized in that the terpolymer comprises, by weight, 40 to 95% of monomer (a), 0.25 to 50% of monomer (b) and 0.1 to 55% of monomer (c).
46. (Original) The composition of claim 1, characterized in that the cationic polyvinylpyrrolidones are chosen from terpolymers vinylpyrrolidone/dimethylaminopropylmethacrylamide/dodecyldimethylmethacrylamidopropylammonium tosylate, the terpolymers vinylpyrrolidone/dimethylaminopropylmethacrylamide/cocoyldimethylmethacrylamidopropylammonium tosylate, the terpolymers vinylpyrrolidone/dimethylaminopropylmethacrylamide/lauryldimethylmethacrylamidopropylammonium tosylate or chloride.
47. (Currently amended) The composition of claim 39, characterized in that the weight-ratio molecular mass of the cationic polyvinylpyrrolidones is between 500 and 20 000 000, ~~preferably between 200 000 and 2 000 000 and more preferably between 400 000 and 800 000.~~
48. (Original) The composition of claim 1, in which the polymer containing a fatty chain is an anionic amphiphilic polymer containing at least one hydrophilic unit chosen from the units acrylic acid and methacrylic acid and at least one hydrophobic unit chosen from the units of the (C<sub>10</sub>-C<sub>30</sub>)alkyl ester of acrylic acid type and of the (C<sub>10</sub>-C<sub>30</sub>)alkyl ester of methacrylic acid type.
49. (Original) The composition of claim 48, such that the hydrophobic unit of the anionic amphiphilic polymer is chosen from the units of the (C<sub>12</sub>-C<sub>22</sub>)alkyl ester of acrylic acid type and of the (C<sub>12</sub>-C<sub>22</sub>)alkyl ester of methacrylic acid type.
50. (Original) The composition of claim 48, such that the anionic amphiphilic polymer is a polymer of acrylic acid and of lauryl methacrylate.
51. (Original) The composition of claim 1, in which the anionic polymer containing a fatty chain is an anionic amphiphilic polymer containing at least one hydrophilic unit of the acrylic acid type and at least one allyl ether unit containing a fatty chain.
52. (Original) The composition of claim 51, characterized in that the allyl ether unit containing a fatty chain corresponds to the monomer having the following formula (I):



in which R' denotes H or CH<sub>3</sub>, B denotes the ethyleneoxy radical, n is zero or denotes an integer ranging from 1 to 100, R denotes a hydrocarbon radical chosen from the alkyl, arylalkyl, aryl, alkylaryl or cycloalkyl radicals, comprising from 8 to 30 carbon atoms.

53. (Original) The composition of claim 52, characterized in that the hydrocarbon radical is alkyl or alkylaryl and comprises from 10 to 24 carbon atoms.

54. (Original) The composition of either of claim 52, characterized in that, in the formula (I), R' denotes H, n is equal to 10 and R denotes a stearyl radical.

55. (Currently amended) The composition of claim 1, in which the cationic tertiary para-phenylenediamine(s) having a pyrrolidine ring represent from 0.001 to 10%, ~~and preferably from 0.005 to 6%~~ by weight relative to the total weight of the composition.

56. (Currently amended) The composition of claim 1, in which the polymer containing a fatty chain represents from 0.05% to 20%, ~~preferentially from 0.1% to 10% and preferably from 0.5% to 5%~~ by weight relative to the total weight of the composition.

57. (Original) The composition of claim 1, such that it additionally contains at least one additional cationic polymer.

58. (Original) The composition of claim 1, such that it additionally contains at least one additional thickening polymer.

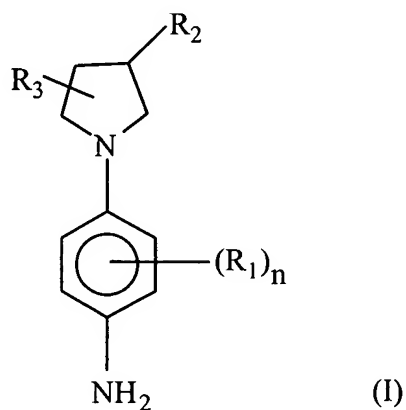
59. (Original) The composition of claim 1, such that it additionally contains at least one surfactant chosen from the group consisting of anionic surfactants, amphoteric or zwitterionic surfactants, nonionic surfactants and cationic surfactants.

60. (Original) The composition of claim 1, such that it comprises at least one additional oxidation base other than cationic tertiary para-phenylenediamines having a pyrrolidine ring chosen from para-phenylenediamines, bis-phenylalkylenediamines, para-aminophenols, ortho-aminophenols, heterocyclic bases and their addition salts.

61. (Currently amended) The composition of claim 60, in which the additional oxidation base(s) are present in a quantity of between 0.001 to 20% by weight ~~and preferably between 0.005 and 6% by weight~~ relative to the total weight of the composition.
62. (Original) The composition of claim 1, such that it additionally comprises at least one coupler chosen from meta-phenylenediamines, meta-aminophenols, meta-diphenols, naphthalene couplers, heterocyclic couplers and their addition salts.
63. (Original) The composition of claim 62, such that the coupler is chosen from 1,3-dihydroxybenzene, 1,3-dihydroxy-2-methylbenzene, 4-chloro-1,3-dihydroxybenzene, 2,4-diamino-1-( $\beta$ -hydroxyethoxy)benzene, 2-amino-4-( $\beta$ -hydroxyethylamino)-1-methoxybenzene, 1,3-diaminobenzene, 1,3-bis(2,4-diaminophenoxy)propane, 3-ureidoaniline, 3-ureido-1-dimethylaminobenzene, sesamol, 1- $\beta$ -hydroxyethylamino-3,4-methylenedioxybenzene,  $\alpha$ -naphthol, 2-methyl-1-naphthol, 6-hydroxyindole, 4-hydroxyindole, 4-hydroxy-N-methylindole, 2-amino-3-hydroxypyridine, 6-hydroxybenzomorpholine, 3,5-diamino-2,6-dimethoxypyridine, 1-N-( $\beta$ -hydroxyethyl)amino-3,4-methylenedioxybenzene, 2,6-bis( $\beta$ -hydroxyethylamino)toluene and their addition salts.
64. (Currently amended) The composition of claim 62, such that the coupler(s) are present in a quantity of between 0.001 and 20%, ~~preferably between 0.005 and 6%~~ by weight relative to the total weight of the composition.
65. (Original) The composition of claim 1, such that it additionally comprises at least one direct dye.
66. (Original) The composition of claim 1, such that it additionally comprises at least one hydroxylated solvent such as ethanol, propylene glycol, glycerol, polyol monoethers.
67. (Original) The composition of claim 1, such that it comprises an oxidizing agent chosen from hydrogen peroxide, urea peroxide, alkali metal bromates, persalts, peracids and oxidase enzymes, and preferably hydrogen peroxide.
68. (Original) A method for the oxidation dyeing of keratinous fibres, characterized in that a dyeing composition as defined in claim 1 is applied to the fibres in the presence of an oxidizing agent.

69. (Original) A multicompartiment device in which the first compartment contains a dyeing composition for dyeing keratinous fibres, as defined in claim 1, and a second compartment contains an oxidizing agent.

70. (New) A dyeing composition for dyeing keratinous fibres comprising, in an appropriate dyeing medium, at least one cationic tertiary paraphenylenediamine containing a pyrrolidine ring, and at least one polymer containing a fatty chain chosen from cationic polyurethanes containing a fatty chain, cationic celluloses containing a fatty chain, cationic derivatives of polyvinylpyrrolidone containing a fatty chain, anionic polymers containing a fatty chain containing at least one unit of the (C<sub>10</sub>-C<sub>30</sub>)alkyl ester of (meth)acrylic acid type or at least one allyl ether unit containing a fatty chain, wherein said cationic tertiary paraphenylenediamine containing a pyrrolidine ring corresponds to formula I:



in which

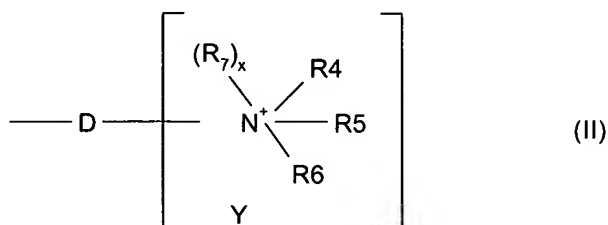
n varies from 0 to 4, it being understood that when n is greater than or equal to 2, then the radicals R<sub>1</sub> may be identical or different,

R<sub>1</sub> represents a halogen atom; a saturated or unsaturated, aliphatic or alicyclic, C<sub>1</sub>-C<sub>6</sub> hydrocarbon chain, it being possible for the chain to contain one or more oxygen, nitrogen, silicon or sulphur atoms or an SO<sub>2</sub> group, and it being possible for the chain to be substituted with one or more hydroxyl or amino radicals; an onium radical Z, the radical R<sub>1</sub> not containing a peroxide bond, or diazo, nitro or nitroso radicals,

R<sub>3</sub> represents a hydrogen atom or a hydroxyl radical.



R<sub>2</sub> represents an onium radical Z selected from formula (II), formula (III) or formula (IV), wherein formula (II) corresponds to:



in which

D is a single bond of a linear or branched C<sub>1</sub>-C<sub>14</sub> alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl, C<sub>1</sub>-C<sub>6</sub> alkoxy or amino radicals and which may carry one or more ketone functional groups;

R<sub>4</sub>, R<sub>5</sub> and R<sub>6</sub>, taken separately, represent a C<sub>1</sub>-C<sub>15</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an aryl radical; a benzyl radical; a C<sub>1</sub>-C<sub>6</sub> amidoalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical in which the amine is mono- or di-substituted with a C<sub>1</sub>-C<sub>4</sub> alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; or

R<sub>4</sub>, R<sub>5</sub> and R<sub>6</sub> together, in pairs, form, with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated carbon ring which may contain one or more heteroatoms, it being possible for the cationic ring to be substituted with a halogen atom, a hydroxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a C<sub>1</sub>-C<sub>6</sub> alkoxy radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, an amido radical, a carboxyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl radical, a thio (-SH) radical, a C<sub>1</sub>-C<sub>6</sub> thioalkyl (-R-SH) radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical;

R<sub>7</sub> represents a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl

radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical whose amine is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carboxyalkyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical; a C<sub>1</sub>-C<sub>6</sub> trifluoroalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a C<sub>1</sub>-C<sub>6</sub> sulphonamidoalkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphinyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylsulphonamido(C<sub>1</sub>-C<sub>6</sub>)alkyl radical;

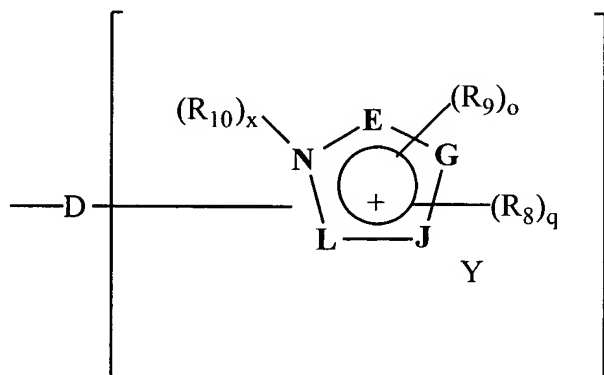
x is 0 or 1,

when x = 0, then the linking arm is attached to the nitrogen atom carrying the radicals R<sub>4</sub> to R<sub>6</sub>; with the proviso that when the linking arm D is a covalent bond then R<sub>4</sub> is chosen from or an aryl radical; a benzyl radical; a C<sub>1</sub>-C<sub>6</sub> amidoalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical in which the amine is mono- or di-substituted with a C<sub>1</sub>-C<sub>4</sub> alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; or;

when x = 1, then two of the radicals R<sub>4</sub> to R<sub>6</sub> form, together with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated ring and D is linked to the carbon atom of the saturated ring;

Y is a counter-ion;

and formula (III) corresponds to:



(III)

in which

D is a single bond or a linear or branched C<sub>1</sub>-C<sub>14</sub> alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl, C<sub>1</sub>-C<sub>6</sub> alkoxy or amino radicals, and which may carry one or more ketone functional groups;

the vertices E, G, J, L, which are identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a pyrrole, pyrazole, imidazole, triazole, oxazole, isooxazole, thiazole, isothiazole ring,

q is an integer between 0 and 4 inclusive;

o is an integer between 0 and 3 inclusive;

q+o is an integer between 0 and 4;

the radicals R<sub>8</sub>, which are identical or different, represent a halogen atom, a hydroxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a C<sub>1</sub>-C<sub>6</sub> alkoxy radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, an amido radical, a carboxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkylcarbonyl radical, a thio radical, a C<sub>1</sub>-C<sub>6</sub> thioalkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical or a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; it being understood that the radicals R<sub>8</sub> are carried by a carbon atom,

the radicals R<sub>9</sub>, which are identical or different, represent a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a benzyl radical; it being understood that the radicals R<sub>9</sub> are carried by a nitrogen,

R<sub>10</sub> represents a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical, a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical whose amine is substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carboxyalkyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical; a C<sub>1</sub>-C<sub>6</sub> trifluoroalkyl

radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a C<sub>1</sub>-C<sub>6</sub> sulphonamidoalkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphinyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylsulphonamido(C<sub>1</sub>-C<sub>6</sub>)alkyl radical;

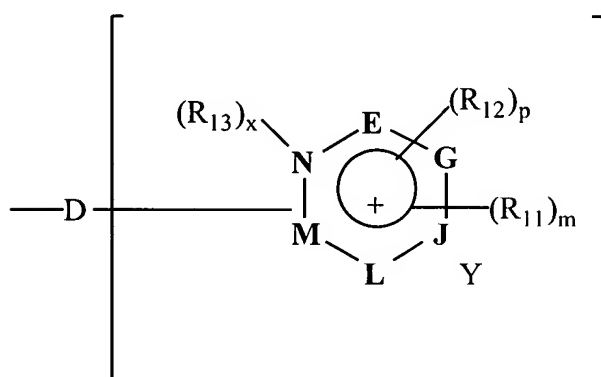
x is 0 or 1

when x = 0, the linking arm D is attached to the nitrogen atom,

when x = 1, the linking arm D is attached to one of the vertices E, G, J or L,

Y is a counter-ion;

and formula (IV) corresponds to:



(IV)

in which:

D is a single bond or a linear or branched C<sub>1</sub>-C<sub>14</sub> alkylene chain which may contain one or more heteroatoms chosen from an oxygen, sulphur or nitrogen atom, and which may be substituted with one or more hydroxyl, C<sub>1</sub>-C<sub>6</sub> alkoxy or amino radicals, and which may carry one or more ketone functional groups;

the vertices E, G, J, L and M, which are identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a ring chosen from the pyridine, pyrimidine, pyrazine, triazine and pyridazine rings;

p is an integer between 0 and 3 inclusive;

m is an integer between 0 and 5 inclusive;

$p+m$  is an integer between 0 and 5;

the radicals  $R_{11}$ , which are identical or different, represent a halogen atom, a hydroxyl radical, a  $C_1$ - $C_6$  alkyl radical, a  $C_1$ - $C_6$  monohydroxyalkyl radical, a  $C_2$ - $C_6$  polyhydroxyalkyl radical, a  $C_1$ - $C_6$  alkoxy radical, a  $\text{tri}(C_1\text{-}C_6)\text{alkylsilane}(C_1\text{-}C_6)\text{alkyl}$  radical, an amido radical, a carboxyl radical, a  $C_1$ - $C_6$  alkylcarbonyl radical, a thio radical, a  $C_1$ - $C_6$  thioalkyl radical, a  $(C_1\text{-}C_6)\text{alkylthio}$  radical, an amino radical, an amino radical which is substituted with a  $(C_1\text{-}C_6)\text{alkyl}$ ,  $(C_1\text{-}C_6)\text{alkylcarbonyl}$ , amido or  $(C_1\text{-}C_6)\text{alkylsulphonyl}$  radical; a  $C_1$ - $C_6$  monohydroxyalkyl radical or a  $C_2$ - $C_6$  polyhydroxyalkyl radical; it being understood that the radicals  $R_{11}$  are carried by a carbon atom,

the radicals  $R_{12}$ , which are identical or different, represent a  $C_1$ - $C_6$  alkyl radical, a  $C_1$ - $C_6$  monohydroxyalkyl radical, a  $C_2$ - $C_6$  polyhydroxyalkyl radical, a  $\text{tri}(C_1\text{-}C_6)\text{alkylsilane}(C_1\text{-}C_6)\text{alkyl}$  radical, a  $(C_1\text{-}C_6)\text{alkoxy}(C_1\text{-}C_6)\text{alkyl}$  radical, a  $C_1$ - $C_6$  carbamylalkyl radical, a  $(C_1\text{-}C_6)\text{alkylcarboxy}(C_1\text{-}C_6)\text{alkyl}$  radical, a benzyl radical; it being understood that the radicals  $R_{12}$  are carried by a nitrogen,

$R_{13}$  represents a  $C_1$ - $C_6$  alkyl radical; a  $C_1$ - $C_6$  monohydroxyalkyl radical; a  $C_2$ - $C_6$  polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a  $C_1$ - $C_6$  aminoalkyl radical, a  $C_1$ - $C_6$  aminoalkyl radical whose amine is mono- or di-substituted with a  $(C_1\text{-}C_6)\text{alkyl}$ ,  $(C_1\text{-}C_6)\text{alkylcarbonyl}$ , amido or  $(C_1\text{-}C_6)\text{alkylsulphonyl}$  radical; a  $C_1$ - $C_6$  carboxyalkyl radical; a  $C_1$ - $C_6$  carbamylalkyl radical; a  $C_1$ - $C_6$  trifluoroalkyl radical; a  $\text{tri}(C_1\text{-}C_6)\text{alkylsilane}(C_1\text{-}C_6)\text{alkyl}$  radical; a  $C_1$ - $C_6$  sulphonamidoalkyl radical; a  $(C_1\text{-}C_6)\text{alkylcarboxy}(C_1\text{-}C_6)\text{alkyl}$  radical; a  $(C_1\text{-}C_6)\text{alkylsulphinyl}(C_1\text{-}C_6)\text{alkyl}$  radical; a  $(C_1\text{-}C_6)\text{alkylsulphonyl}(C_1\text{-}C_6)\text{alkyl}$  radical; a  $(C_1\text{-}C_6)\text{alkylcarbonyl}(C_1\text{-}C_6)\text{alkyl}$  radical; an  $N\text{-(}C_1\text{-}C_6)\text{alkylcarbamyl}(C_1\text{-}C_6)\text{alkyl}$  radical; an  $N\text{-(}C_1\text{-}C_6)\text{alkylsulphonamido}(C_1\text{-}C_6)\text{alkyl}$  radical;

$x$  is 0 or 1

when  $x = 0$ , the linking arm D is attached to the nitrogen atom,

when  $x = 1$ , the linking arm D is attached to one of the vertices E, G, J, L or M,

Y is a counter-ion.